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ABSTRACT

The increasingly popular view of the counseling process from an interactional perspective necessitates the development of new measurement instruments which are suitable to the study of the reciprocal interaction between people. The validity of the Relational Communication Coding System, an instrument which operationalizes the constructs of complementarity and symmetry in human communication processes, was directly assessed in a two-factor design. Undergraduates (N=242) who were divided into 10 groups listened to one of five audiotaped interactions. Subjects were told that the persons on the tape were either a husband and wife or a counselor and client. Each interaction was loaded with one type of symmetrical or complementary communication pattern. The effects of pattern, context (marital versus counseling), and their interaction on subjects' perceptions of the relationship control were examined. The results revealed that interactions loaded with certain types of relational control patterns were reliably distinguished by outside observers. The context of the interaction was found to have little effect on how well observers' perceptions of relational control reflected the actual coded communication. These findings generally support the use of the Relational Communication Control Coding System in counseling process research. (NB)

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Validation of a Communication Process Measure for Coding Control in Counseling

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Presented at the 1985 American Psychological Association Convention, Los Angeles, California.

Abstract

The validity of the Relational Communication Coding System (Ericson & Rogers, 1973) was directly assessed in a two-factor design. This instrument operationalizes the constructs of symmetry and complementarity in human communication process, following the work of Bateson (1936) and other researchers (Sluzki & Beavin, 1965/1977) in the "interactional" or "systems" tradition. Subjects were 242 undergraduates in 10 groups who listened to one of five audiotaped interactions, after being told either that the pair was a) a husband and wife or b) a counselor and client. Each interaction was "loaded" with one type of symmetrical or complementary communication pattern. The effects of pattern, context (marital vs. counseling), and their interaction on subjects' perceptions of the relationship control were examined. The results generally supported the use of this measure for counseling process research.

Validation of a Communication Process Measure for Coding Control in Counseling

Counseling process is being viewed increasingly from an interactional perspective, in which individual behavior or communication can only be fully understood by its antecedents and pragmatic effects within the context of a relationship (e.g., Strong & Claiborn, 1982; Watzlawick & Weakland, 1977). This perspective necessitates the development of new measurement instruments, suitable to the study of the reciprocal interaction between people, rather than traits or other individual dynamics. The Relational Communication Coding System (Ericson & Rogers, 1973) is a fairly recent instrument which operationalizes the constructs of complementarity and symmetry in human communication processes, following the work of Gregory Bateson (1936) and other researchers (Sluzki & Beavin, 1965,1977) in the "systems theory" tradition. Its rationale and construction are firmly grounded within this "systems" or "interactional" framework; thus it is a promising tool for studying propositions about communication in a) normal and dysfunctional human systems and b) therapeutic change. And in fact, this coding system, although originally devised and used to study marital communication, is becoming increasingly popular for studying various aspects of control in counselor-client relationships (Lichtenberg & Barke, 1981; Miars, 1982; Thames & Johnson, 1982; Heatherington & Allen, 1984).

Nonetheless, few studies have directly examined the validity of this coding system (Ayres & Miura, 1981; Folger & Sillars, 1980), and none have specifically studied its validity for use in counseling contexts.

This paper reports the results of a validity study in which taped interactions were "loaded" with a high percentage of certain relational control patterns: competitive symmetrical patterns (↑↑), in which both people attempt to define themselves as in control by their verbal messages, complementary patterns (↑↓ and ↓↑) in which one person defines him/herself as in control while the other accepts that definition, submissive symmetrical patterns (↓↓) in which both vie to relinquish control, and neutralized symmetrical patterns (→→), in which both give messages which neither seek to gain nor give up control. (For a full description of how these codes are derived from the raw data, see Rogers [1979], Rogers & Farace [1975].) Assuming that the coding system has at least criterion validity, outside observers' perceptions of the control dynamics of the interaction should show some correspondence with the coded control dynamics, and this was examined. A second question concerned whether the correspondence would be better when the coding was applied to a marital interaction vs. a counseling interaction. Use of the system in the counseling process studies cited earlier has raised some questions regarding whether certain coding assumptions make more sense when applied to

marital contexts than to counseling contexts. Thus the study was designed to answer this question as well.

Method

Subjects

Subjects were 242 introductory psychology students, 104 males and 138 females, who received course credit for their participation. Subjects were randomly assigned to one of 10 groups (conditions), constituted by crossing the context (marital vs. counseling) with the five different transcripts. Each group had 23-27 subjects with the exception of one group with 19 subjects; males and females were roughly equally distributed across groups.

Apparatus

Taped interactions. Five transcripts of an interaction which could have taken place between a husband/wife or a counselor/client were written to include a high percentage of one of the following five relational control patterns ↑↑, ↑↓, ↓↑, ↓↓, or →→. Thus the communication process was varied, but the content (people discussing the job stress and smoking habits of one of them) was held constant. (The other 4 possible patterns [↑→, ↓→ , →↑, →↓] were of course included in the interactions but not as the dominant pattern.) Three drafts and two pilot tests of the transcripts to ascertain their naturalness and believability resulted in transcripts which were "loaded" with 39% to 57% (M = 47%) of one particular type of interaction pattern. (Note: if all

patterns were equally frequent, each would represent 11% of the total.) Two unrelated adults (a male, who took the husband/therapist lines and a female, who took the wife/client lines) then made audiotapes from the transcripts. A post-experiment manipulation check showed that the interactions were believable as presented (see Procedure) for 83% of the subjects; the majority who dissented felt that the speakers were more like friends, and only 4 subjects "guessed" the opposite context.

Interaction questionnaire. A five-page Interaction questionnaire which tapped several areas was devised for use in this study. First, subjects rated the quality of the interaction on a 5-point Likert scale (1 = very poor, 5 = very good) and checked one of five control descriptions (e.g., it seemed that both were competing for control, that Speaker A was in control, that speaker B was in control, that both competed to give up control, or that the interaction was essentially neutral with respect to control) which corresponded to the coded patterns of interest. Subjects also rated each speaker's attempted and actual influence in the interaction on a scale from 1 (not at all) to 4 (very much). Finally, subjects rated the process-relevant characteristics of each speaker separately on a 15-item 6-point semantic differential scale. Items were chosen on the basis of past use to reflect both control (e.g., powerful, assertive, strong, dominant) and evaluative(e.g., pleasant, friendly,

caring) dimensions.

Procedure

The groups were run separately, five at a time, with the second set of groups overlapping the first to prevent subjects from meeting. Subjects were asked to listen to a short audiotaped interaction. Depending on the context condition, they were informed either that the speakers were husband and wife or counselor and client; within each of the context conditions each group heard one of the five interactions. Subjects then individually completed the Interaction questionnaire.

Results

The correspondence between subjects' perceptions of relational control in the dyad and the coded relational control is revealed by the frequency data in Table 1.

Insert Table 1 about here

Clear, nonrandom patterns emerged from a chi-square analysis of the data combined across contexts, $\chi^2(16) = 92.78$, $p < .01$. Of the subjects who heard the ↑↑ tape, the highest number of subjects (39%) indicated that both people were competing for control; of the subjects who heard the ↑↓ tape, 49% indicated that the "first" person was asserting control while the other accepted it. It can be seen in the table that the correspondence was higher, for both interactions, in the counseling context.

Subjects' perceptions of the ↓↓ and →→ interactions were consistent in 29% and 36% of the cases, respectively. In both cases, these combined percentages were only the second highest. When the data are examined by context however, it appears that for the neutralized symmetrical interaction (→→) there is the expected correspondence with subjects' perceptions; 48% of the subjects responded that both speakers' messages appeared to be neutral with respect to control. Finally, there was little correspondence between the coded and perceived control patterns in the ↓↑ conditions. The most frequent perceptions of subjects hearing this interaction was that both parties were seeking to give up control.

The type of relational control pattern in the interaction also affected subjects' perceptions of the quality of the interaction, as revealed by a 2-way (context x pattern) ANOVA, F (4,232) = 5.10, $p < .001$. Speakers in the ↑↑ interaction were seen as communicating the least well (M = 2.67, SD = .79), and speakers in the ↓↑ condition were seen as communicating the most well (M = 3.43, SD = 1.02), followed by ↓↓ (M = 3.35, SD = .88), →→ (M = 3.30, SD = 1.04), and ↑↓ (M = 3.10, SD = 1.05). A Newman-Keuls procedure showed that the ↑↑ mean was significantly different from each of the other groups. There was no effect of context on perceived communication quality, and no interaction.

Subjects' perceptions of the interpersonal control of

individual speakers as a function of context and pattern were assessed by a MANOVA procedure on the means (see Table 2) of: Speaker A's a) attempted and b) actual

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Insert Table 2 about here

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influence, and Speaker B's a) attempted and b) actual influence. This revealed no main effect of context and no interaction, but a significant effect of pattern, with a multivariate (Pillai's trace) $F(16,920 = 4.79$, $p < .001$. Univariate F tests revealed significant effects of pattern on A's attempted influence, $F(4,230) = 15.12$, $p < .01$. A's actual influence, $F(4,230) = 7.32$, $p < .001$, and B's actual influence, $F(4,230) = 8.92$, $p < .001$. The data also show that A's and B's perceived actual influence was roughly the same in two symmetrical (↑↑, ↓↓) interactions, that A's perceived influence was higher than B's in the ↑↓ interaction but lower in the ↓↑ interaction, and that B's perceived influence was higher in the ↓↑ but lower in the ↑↓ interactions. The differences were found to be significant by a Newman-Keuls procedure, $p < .05$. The only finding contrary to expectations was that the perceived influence of B (wife, client) was higher than A's in the neutralized symmetrical (↔) interaction.

Factor analysis of the 15-item semantic differential scale revealed two clear (factor loadings ranged .64-.81, median of .72) factors, one labeled "power" including 7

items (e.g., dominant, controlling, strong, assertive) and another labeled "pleasant" including 4 items (e.g., pleasant, friendly, caring). Thus the items were summed to yield two summary scores; the mean "Power" summary scores were examined in the present study and are presented in Table 3. A 2-way ANOVA on Speaker A's power

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Insert Table 3 about here

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score revealed a significant effect of pattern only, $F(4,214) = 21.16$, $p < .001$. Among the significant post-hoc comparisons (Newman-Keuls, $p < .05$), the highest mean Power score (in the ↑↓ group) was significantly different from the three other groups in which Person A was not in the ↑ position. The same procedure on B's mean Power score revealed a significant effect of pattern, $F(4,211) = 8.52$, $p < .001$ and context, $F(1,211) = 6.74$, $p < .01$. Post-hoc pairwise comparisons showed that the latter effect was accounted for by the higher mean Power scores for B in the marital context ($M = 30.3$) than the counseling context ($M = 24.6$) when the interaction was loaded with neutralized symmetrical patterns (→→). The main effect of pattern was accounted for by significant pairwise comparison differences between the ↓↑ group mean vs. each of the other groups in which Speaker B was not in the ↑ position.

Discussion and Conclusions

Two major conclusions can be drawn from these results. One, in general, interactions which are "loaded" with certain types of relational control patterns can be reliably distinguished by outside observers. Two, in this study, the context of the interaction had little effect on how well observers' perceptions of relational control reflected the actual coded communication. These conclusions require some qualification/elaboration.

Not all interactions were given ratings equally consistent with the coding. Two of them, the ↑↑ and ↑↓ interactions were especially consistent. They contained, by definition, high frequencies of instructions, orders, and nonsupport statements. It seems that the control definition carried by these kinds of messages is clear. Subjects' perceptions of the actual influence of the individual speakers also reflected the coding (in the ↑↑ condition the "actual influence" means were very close, while in the ↑↓ condition A's mean was higher) as did the mean "Power" scores. Moreover, the fact that subjects rated participants in the ↑↑ interaction as communicating the least well is consistent with Parks' (1977) proposal that competitive symmetry is associated with more open conflict and less satisfying communication.

The submissive (↓↓) and neutralized (→→) symmetrical patterns were rated as such by a substantial, though only second highest, number of subjects. The former contained

many extending questions and support messages. It may be that these have less clear control functions, e.g., questions could be seen as deferring to the other person or structuring/leading the conversation; support statements such as "you're right" could be seen as agreeing (↓) or offering judgment (↑). Perhaps, then, subjects were responding to the content or the particular roles in judging it to be a complementary (with husband/counselor ↑) interaction; certainly this is testable. The →→ interaction contained many statements which simply extended the topic of conversation. Subjects perceived this primarily as an interaction in which both people sought to give up control, and secondarily as one in which messages were neutral with respect to control. It may be that following the topic of conversation is seen as a "submissive" act by some subjects; this also would be testable, by examining subjects' perceptions of individual messages in addition to the interaction as a whole. Again, the "actual influence" means for speakers in the interaction were very close, as expected, though for the →→ interaction on both the "actual influence" and "Power" scores, Speaker B (wife/client) was rated higher. This was particularly so when "B" was presented as the wife. In this transcript, "B" is essentially holding the floor by telling a continuing story while "A" responds in a Rogerian listening manner, which may explain the subjects' perceptions.

The ↓↑ interaction, which contained many straightforward husband/therapist question-wife/client answer sequences, and husband/therapist support statements was not perceived as such by the subjects. Instead, the majority believed that both participants were seeking to give up control in the interaction. At the same time, the questionnaire ratings of individual speakers were very consistent with the coded patterns.[1] In ratings of both actual influence and "Power," relative to the other four transcripts, A's mean and B's mean were the lowest and highest, respectively, as expected. Moreover, B's means were also higher relative to A's. This discrepancy may be in part accounted for by some subjects second-guessing or impugning intention of the speakers, especially in the counseling interactions, where ↔ was also a frequent (30%) response to this. One subject, for example, explained his ↔ response as follows: "the client had more control, but I don't feel the counselor wanted to take it from her. She was telling him about her day and getting things out that she needed. For this reason, though, I am not sure if the counselor accepted the clients' control or acted neutrally." (Here is a "naive" subject expressing the dilemma of coding "meta-complimentary" interaction, which communications researchers have so far avoided!)

In summary, these data provide empirical evidence for the usefulness of the Relational Communication Control

Coding System in counseling process research. They also demand further investigations of the coding of simple questions and answers, with an eye to revisions that will enhance the system's validity.

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Footnotes

[1]Speaker A was always the male (husband or therapist) and Speaker B was always the female (wife or client). A replication in which sex and role were counterbalanced (e.g., Speaker A was wife or therapist) would expand the generalizability of these results.

Table 1

Correspondence Between Coded and Perceived Relational Control Patterns

Percent of Subjects who perceived the relationship as:	Predominant (coded) control pattern in taped Interaction, by Marital (M), Counseling (C) Contexts and Combined (Cb) across Context														
	↑↑			↑↓[1]			↓↑[2]			↓↓			→→		
	M	C	Cb	M	C	Cb	M	C	Cb	M	C	Cb	M	C	Cb
↑↑	37	42	39	32		20	04	09	06	17	25	18			
↑↓[1]	37	13	25	39	65	49	13	09	11	33	36	35	04	04	04
↓↑[2]		17	08	11	12	13	08	04	06	04	04	04	04	04	20
↓↓		25	12	14	12	11	67	48	57	29	32	31	44	56	50
→→	26	04	16	04	12	07	08	30	19	17	08	12	48	24	36

1 husband/therapist ↑, wife/client ↓
2 husband/therapist ↓, wife/client ↑

Table 2

Mean Ratings of Speakers' Attempted and Actual Influence as a Function of Patern and Context

Ratings of:	Pattern ↑↑	↑↓	↓↑	↓↓	→→
A's attempted influence					
Combined M	3.22	3.31	2.40	2.84	2.14
Marital M	3.15	2.95	2.42	2.88	1.92
Counseling M	3.29	3.58	2.39	2.80	2.36
B's attempted influence					
Combined M	2.94	2.75	3.19	3.02	3.14
Marital M	2.78	2.84	3.13	3.08	3.04
Counseling M	3.12	2.70	3.26	2.96	3.24
A's actual influence					
Combined M	2.62	2.96	2.10	2.73	2.16
Marital M	2.63	2.79	2.04	2.62	2.00
Counseling M	2.62	3.10	2.17	2.85	2.32
B's actual influence					
Combined M	2.63	2.38	3.36	2.75	3.08
Marital M	2.63	2.26	3.35	2.63	3.12
Counseling M	2.63	2.46	3.38	2.88	3.04

Table 3

Mean "Power" Scores as a Function of Pattern and Context

	Pattern				
	↑↑	↑↓	↓↑	↓↓	→→
Speaker A					
Combined M	30.75	33.69	22.21	27.94	22.27
Marital M	31.50	32.06	22.00	27.04	21.04
Counseling M	29.95	34.80	22.45	28.79	23.40
Speaker B					
Combined M	24.11	21.40	28.76	27.60	27.32
Marital M	23.79	21.47	29.86	29.63	30.27
Counseling M	24.50	21.36	27.55	25.80	24.63